



National Climate Predictions and Projections Platform (NCPP)

Introduction and saying something about CFS

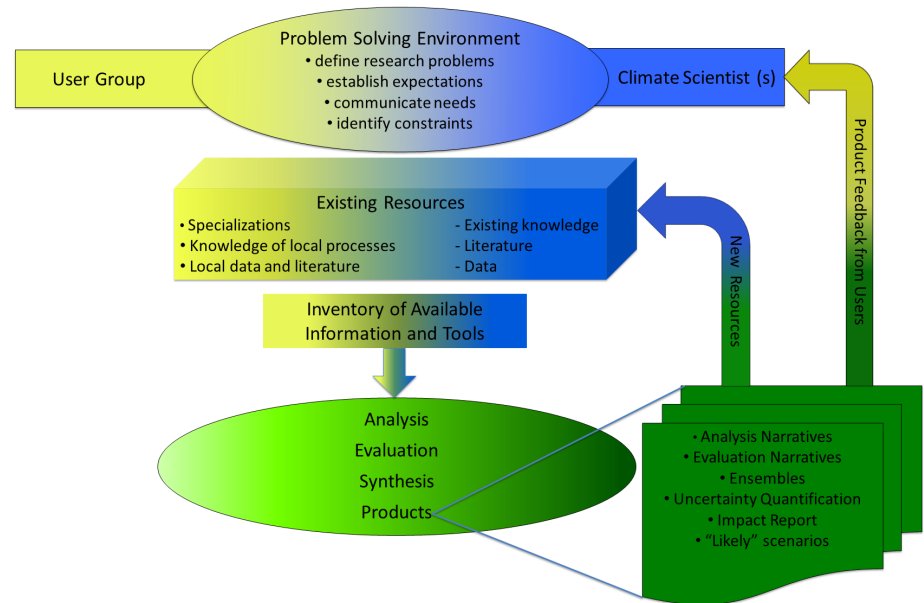
[Richard B. Rood](#)



Mission and Strategy

Mission: Supports state-of-the-art approaches to develop and deliver comprehensive regional climate information and facilitate its use in decision making and adaptation planning.

Strategy: A community enterprise where climate information users, infrastructure developers, and scientists come together in a collaborative problem solving environment.





NCPP is an emergent community

- Focused on the synthesis of existing climate capabilities spread across federal agencies, regional and local governments, universities, professional societies, nonprofits, and commercial activities
- Community participation in development of capabilities and problem solving
 - Evolving governance structure → based on open-source, open-innovation principles



What is different in the past decade?

- Emergence of open-source, open innovation communities for software development and complex problem solving.
- Evolution of governance practices and management approaches that lead to functioning, sustainable organizations.
- Development and deployment of tools to build and support communities.
- Structured, co-developed problem solving with multiple constituencies



NCPP Status (Current and Interim)

- Organization
 - Technical team
 - 40+ members from federal agencies, universities, and other organizations
 - NOAA, DOI/(USGS, Reclamation), NCAR, NASA, DOE, universities
 - Core organizing team (responsible for NCPP)
 - 9 full time and part time people + 2 in NOAA Management
 - Interim Climate Science Applications Team
 - Current focus, downscaled data sets
- Work through use cases and pilot projects that support
 - Development of IT infrastructure
 - Provision of quality-assessed, digital climate data
 - Evaluation of models and analysis of credibility
 - Provision of guidance and advisory narratives



NCPP Status (Current and Interim)

- Extend capabilities through engagement of existing networks
 - ***e.g.***, NOAA RISA, USGS CSC, ...
 - ***e.g.***, Professional Societies, ICLEI, American Planning Association,
 - ***e.g.***, Local consortia, University, Private



Thinking about CFS

- Multi-scale physics and scale interaction
 - The initialization problem
 - Robustness of ensemble methods / design
 - Reconciliation of physical processes
 - Internal variability / persistence
 - Seasonal forecast skill scores aid long-term climate projections
- Multi-scale services and applications
 - Seasonal experience strongly informs usability of climate information ([Lemos and Rood, 2010](#))
 - Operational climate indices, products for long-term climate projections, embedding services in simulations
- Infrastructure to support scientific investigation, interchange of ideas, interoperability of code
 - NCAR CESM Software Infrastructure Improvements
 - Research to Operations



Temporary URLs for more info

- [NCP Mission and Strategy](#)
- [NCP Initial Use Cases](#)
- [NCP Meeting Minutes](#)
- [NCP Core Team Capability Summaries](#)
- [Initial ESGF Portal \(installed only\)](#)